Supporting Information

Turer et al. 10.1073/pnas.1621400114

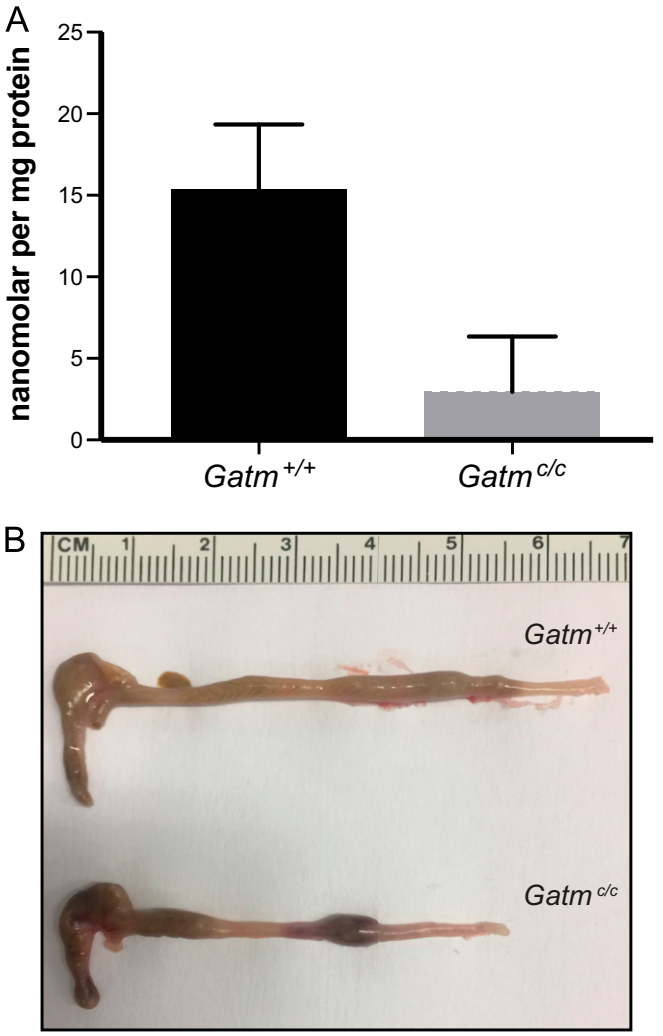

Fig. S1. Creatine content and colitis induced shortening of *Gatm*$^{c/c}$ colons. (*A*) Creatine concentration in *Gatm*$^{c/c}$ ($n = 4$) and littermate control (*Gatm*$^{+/+}$, $n = 4$) colonic epithelial cells. $P < 0.005$. (*B*) Colons of *Gatm*$^{c/c}$ mice exposed to 1.4% DSS for 8 d exhibited shortening. Representative colons are shown for each genotype.

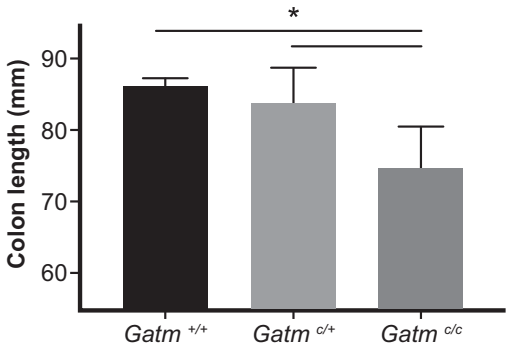

Fig. S2. Colons of trinitrobenzenesulfonic acid (TNBS)-treated *Gatm*$^{c/c}$ mice. Colons of *Gatm*$^{c/c}$ displayed shortening postintrarectal administration of TNBS. Five-month-old male *Gatm*$^{+/+}$ ($n = 4$), *Gatm*$^{c/+}$ ($n = 5$), and *Gatm*$^{c/c}$ ($n = 5$) mice were administered 3 mg of TNBS intrarectally, and colons were harvested and measured 4 d posttreatment. *$P < 0.05$; determined by Student's t test.

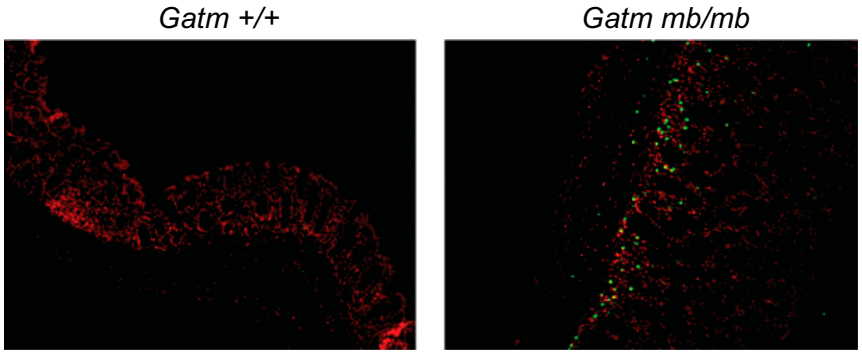

Fig. S3. TUNEL staining of *Gatm*$^{mb/mb}$ colons. Images of TUNEL staining (green) of colon sections from *Gatm*$^{+/+}$ and *Gatm*$^{mb/mb}$ mice on day 6 of 1.5% DSS treatment (10× magnification); images are representative of three independent experiments.

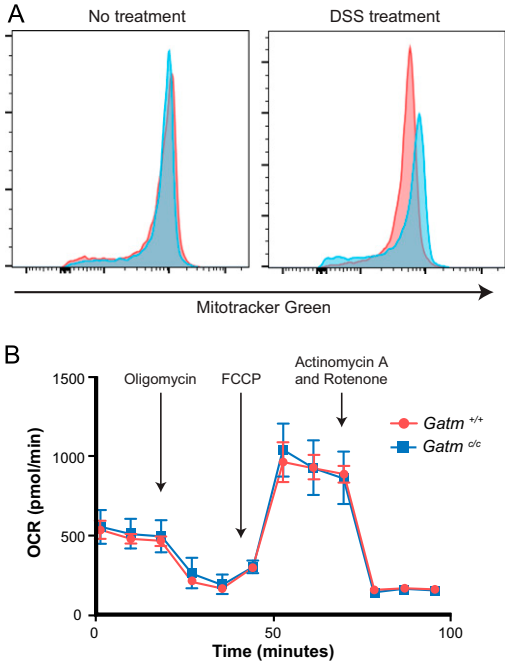

Fig. S4. Mitochondrial mass and functioning in *Gatm*$^{c/c}$ colonocytes. (*A*) Colonocytes from untreated and 3 d DSS-treated *Gatm*$^{c/c}$ (blue) vs. *Gatm*$^{+/+}$ littermates (red) were harvested and stained with MitoTracker Green. Data are representative of three independent experiments. (*B*) Mitochondrial respiration of colonic crypts from mice of the indicated genotypes treated for 3 d with 1.5% DSS was tested using Seahorse Flux. Oligomycin, carbonyl cyanide 4-(trifluoromethoxy) phenylhydrazone (FCCP), and a mix of rotenone and antimycin A were serially injected to measure ATP-linked respiration, maximal respiration, and non-mitochondrial respiration, respectively. Data are representative of three independent experiments.